

ANALYTICA CHIMICA ACTA

An international journal devoted to all branches of analytical chemistry

(Full texts are incorporated in C/JELSEVIER, a file in the Chemical Journals Online database available on STN International; Abstracted, indexed in: Aluminium Abstracts; Anal. Abstr.; Biol. Abstr.; BIOSIS; Chem. Abstr.; Curr. Contents Phys. Chem. Earth Sci.; Engineered Materials Abstracts; Excerpta Medica; Index Med.; Life Sci.; Mass Spectrum. Bull.; Material Business Alerts; Metals Abstracts; Sci. Citation Index)

VOL. 390 NOS. 1-3

CONTENTS

May 19, 1999

Chemometrics

Quality of resolution of black multicomponent systems

- B.-V. Grande and O.M. Kvalheim (Bergen, Norway) 1
- Complexation of cadmium by the C-terminal hexapeptide Lys-Cys-Thr-Cys-Cys-Ala from mouse metallothionein: study by differential pulse polarography and circular dichroism spectroscopy with multivariate curve resolution analysis
- J. Mendieta, M.S. Díaz-Cruz, A. Monjonell, R. Tauler and M. Esteban (Barcelona, Spain) 15

Capillary electrophoresis

Sequential injection sample introduction microfluidic-chip based capillary electrophoresis system

- Q. Fang, F.-R. Wang, S.-L. Wang, S.-S. Liu, S.-K. Xu and Z.-L. Fang (Shenyang, China) 27
- On-line ion-exchange preconcentration in a flow injection system coupled to capillary electrophoresis for the direct determination of UV absorbing anions
- L. Arce (Córdoba, Spain), P. Kuban (Stockholm, Sweden), A. Ríos, M. Valcárcel (Córdoba, Spain) and B. Karlberg (Stockholm, Sweden) 39

Liquid chromatography detection

Waveform optimization for integrated square-wave detection of biogenic amines following their liquid chromatographic separation

- J.C. Hoekstra and D.C. Johnson (Ames, IA, USA) 45
- Sensitive absorption detection for micro-column liquid chromatography by ultraviolet forward-scattering degenerate four-wave mixing
- T. de Beer, P. Beeso, G.Ph. Hoornweg, N.H. Velthorst, U.A.Th. Brinkman and C. Gooijer (Amsterdam, The Netherlands) ... 55

Biosensors and piezoelectric sensors

Biosensor for phenol based on the direct electron transfer blocking of peroxidase immobilising on silica-titanium

- S.S. Rosatto, L.T. Kubota and G. de Oliveira Neto (Campinas, Brazil) 65
- β -Lactamase label-based potentiometric biosensor for α -2 interferon detection
- T.A. Sergeyeva, A.P. Soldatkin, A.E. Rachkov, M.I. Tereschenko, S.A. Piletsky and A.V. El'skaya (Kiev, Ukraine) 73
- Determination of breath alcohol using a differential-type amperometric biosensor based on alcohol dehydrogenase
- J.-K. Park, H.-J. Yee, K.S. Lee, W.-Y. Lee, M.-C. Shin, T.-H. Kim and S.-R. Kim (Seoul, South Korea) 83

(Continued overleaf)



<http://chemweb.com/gateways/elsevier.html>



ContentsDirect, the free e-mail alerting service, delivers the table of contents for this journal directly to your PC, prior to publication. The quickest way to register for

Contents Direct is via the Internet at: <http://www.elsevier.nl/locate/ContentsDirect>.

If you don't have access to the Internet you can register for this service by sending an e-mail message to cdsusbs@elsevier.co.uk - specifying the title of the publication you wish to register for.

Selective piezoelectric odor sensors using molecularly imprinted polymers H.-S. Ji, S. McNiven, K. Ikebukuro and I. Karube (Tokyo, Japan)	93
<i>Electroanalytical chemistry</i>	
Effect of AC voltage frequency on the sensitivity of conductometric detection in microseparation techniques F. Opekar, I. Jelínek and A. Trojánek (Prague, Czech Republic)	101
Electrochemical behaviour of triclosan at a screen-printed carbon electrode and its voltammetric determination in toothpaste and mouthrinse products R.M. Pemberton and J.P. Hart (Bristol, UK)	107
Simultaneous determination of halide and thiocyanate ions by potentiometric precipitation titration and multivariate calibration Y. Ni and A. Wu (Nanchang, China)	117
<i>Liquid-liquid extraction</i>	
Aqueous two-phase extraction system of sodium perfluorooctanoate and dodecyltriethylammonium bromide mixture and its application to porphyrins and dyes A.-J. Tong, J.-J. Dong and L.-D. Li (Beijing, China)	125
<i>Flow analysis</i>	
On-line determination of cyanide in the presence of sulfide by flow injection with pervaporation H. Sulistyarti, T.J. Cardwell (Vic., Australia), M.D. Luque de Castro (Cordoba, Spain) and S.D. Kolev (Vic., Australia)	133
Use of a peroxidase reactor in flow injection analysis for the determination of chloramine and the inhibition kinetics S. Buck, K. Stein and G. Schwedt (Clausthal-Zellerfeld, Germany)	141
A clean analytical method for the spectrophotometric determination of formetanate incorporating an on-line microwave assisted hydrolysis step M.J. Escuriola, A. Morales-Rubio and M. de la Guardia (Burjassot, Spain)	147
<i>Thermal lens spectrometry</i>	
Thermal lens investigation of the temperature dependence of the refractive index of organo-aqueous solutions S.M. Colcombe and R.D. Snook (Manchester, UK)	155
Monitoring supercritical fluid extraction by thermal lens spectrometry with pulsed laser excitation J. Amador-Hernández, J.M. Fernández-Romero (Córdoba, Spain), G. Ramis-Ramos (Burjassot, Spain) and M.D. Luque de Castro (Córdoba, Spain)	163
<i>Mass spectrometry</i>	
The automatic visualisation of carry-over in high-throughput flow injection analysis mass spectrometry R. Richmond and E. Görlach (Basel, Switzerland)	175
Measurement of inorganic acids with rotating ball inlet mass spectrometry H. Ørsnes, T. Graf and H. Degn (Odense, Denmark)	185
Electrospray ionization mass spectrometry of metal complexes. Gas phase formation of a binuclear copper(II)-5-Br-PADAP complex A. Matsumoto, T. Fukumoto, H. Adachi and H. Watarai (Osaka, Japan)	193
<i>Electrothermal atomic absorption spectrometry</i>	
Determination of gallium by graphite furnace atomic absorption spectrometry with combined use of a tungsten-coated L'vov platform tube and a chemical modification technique D. Ma, Y. Okamoto, T. Kumamaru (Higashi-Hiroshima, Japan) and E. Iwamoto (Hiroshima, Japan)	201
Rapid determination of lead and cadmium in biological fluids by electrothermal atomic absorption spectrometry using Zeeman correction N. Campillo, P. Viñas, I. López-García and M. Hernández-Córdoba (Murcia, Spain)	207
<i>Membrane desolvation</i>	
Membrane desolvation for the analysis of organic solutions and liquid chromatographic samples with low power helium microwave induced plasma atomic emission detection O.T. Akinbo and J.W. Carnahan (DeKalb, IL, USA)	217
<i>Environmental analysis</i>	
Sampling aerosols for lead isotopes on a global scale A. Bollhöfer, W. Chisholm and K.J.R. Rosman (Bentley, Australia)	227
Highly sensitive chemiluminescence flow-injection detection of the red tide phytoplankton <i>Heterosigma carterae</i> R. Asai, R. Matsukawa, K. Ikebukuro and I. Karube (Tokyo, Japan)	237

Comparison of AFS and ICP-MS detection coupled with gas chromatography for the determination of methylmercury in marine samples H.E. Louise Armstrong, W.T. Corns, P.B. Stockwell (Orpington, UK), G. O'Connor, L. Ebdon and E. Hywel Evans (Plymouth, UK)	245
<i>Kinetic method</i>	
Kinetic-catalytic-spectrophotometric determination of low concentrations of molybdenum in white wines D. Bejan (Iasi, Romania)	255
<i>Acid dissociation constants</i>	
General equation for determining the dissociation constants of polyprotic acids and bases from additive properties. Part I. Theory I. Jano and J.E. Hardcastle (Denton, TX, USA)	261
General equation for determining the dissociation constants of polyprotic acids and bases from additive properties. Part II. Applications I. Jano and J.E. Hardcastle (Denton, TX, USA)	267
Erratum	275
Book reviews	283
Author Index	287
Calendar of forthcoming meetings	N1